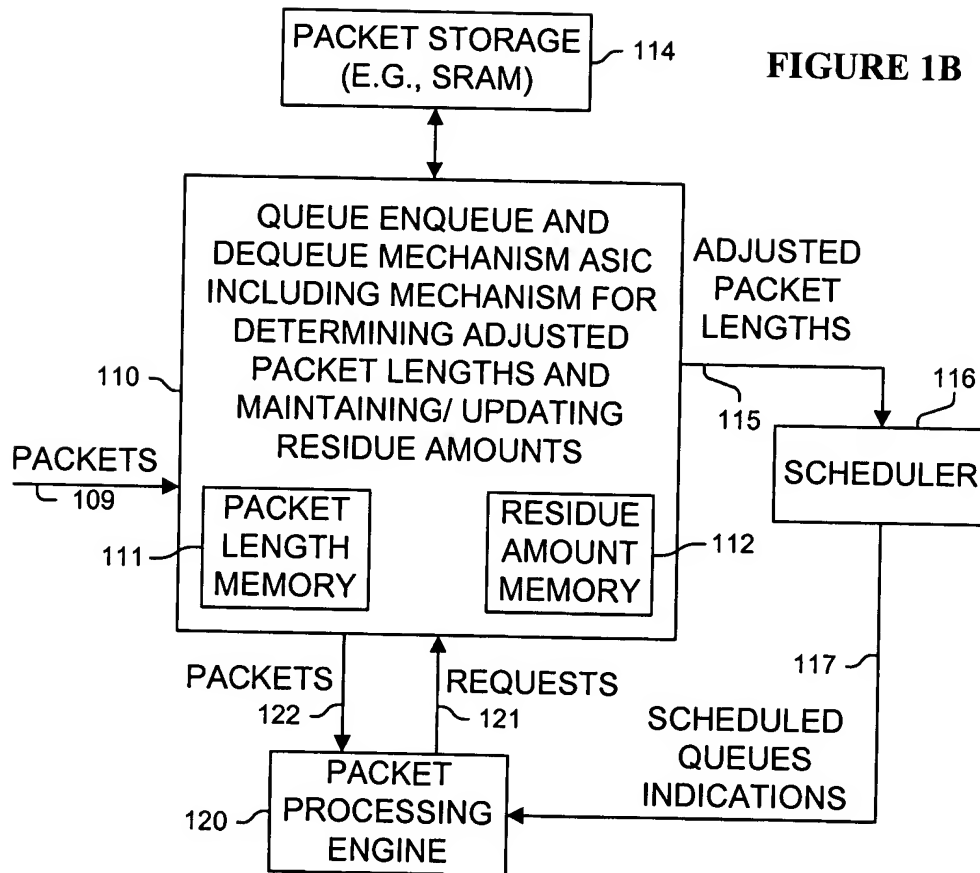


**FIGURE 1A**



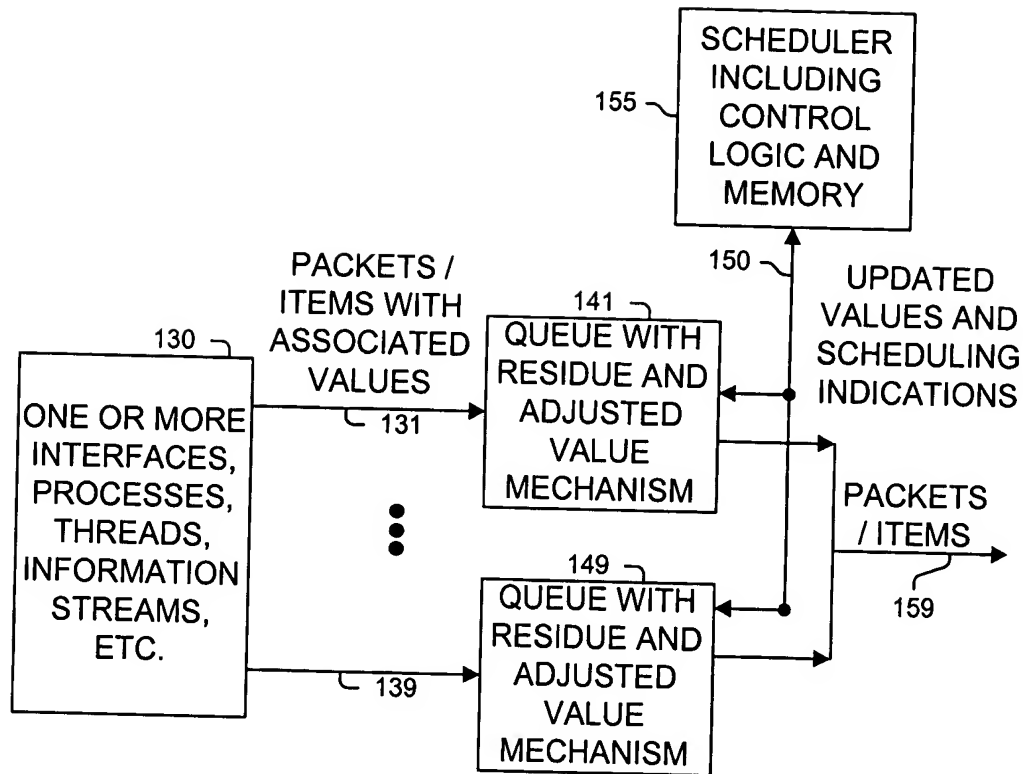
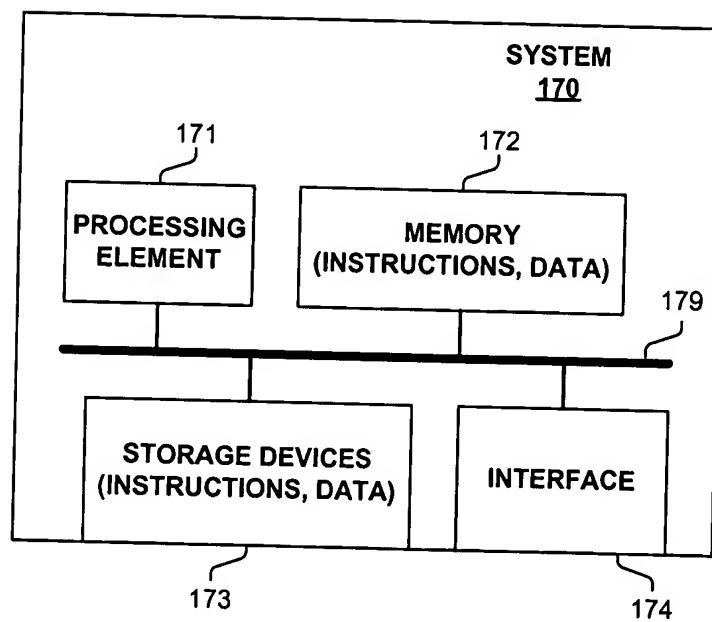
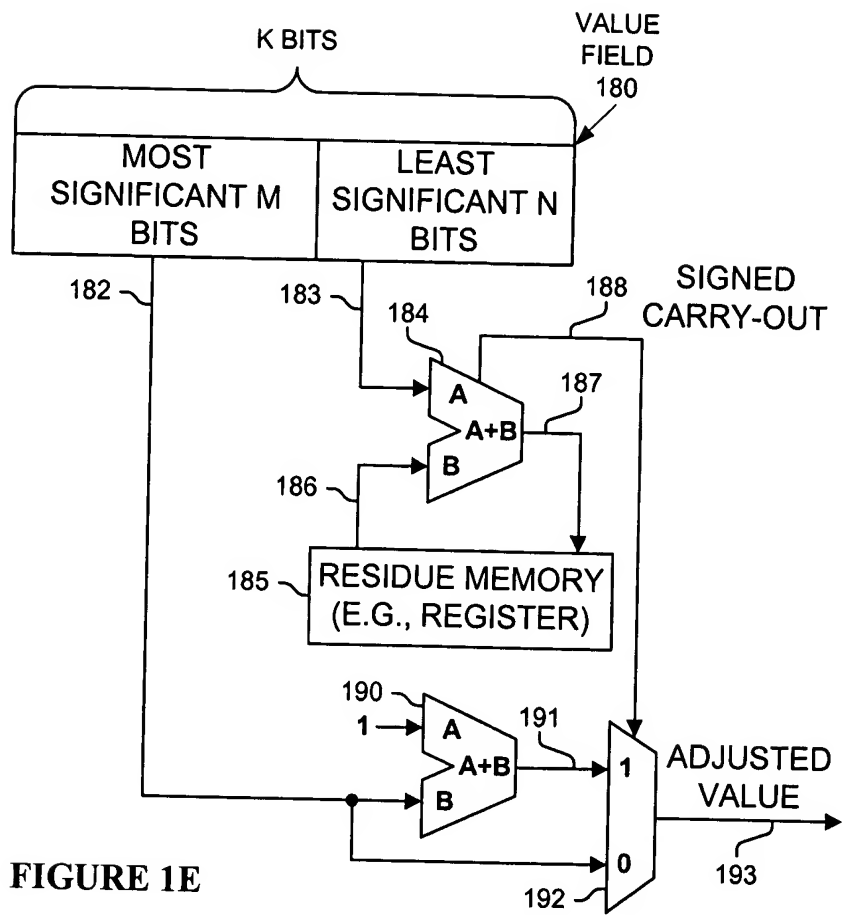


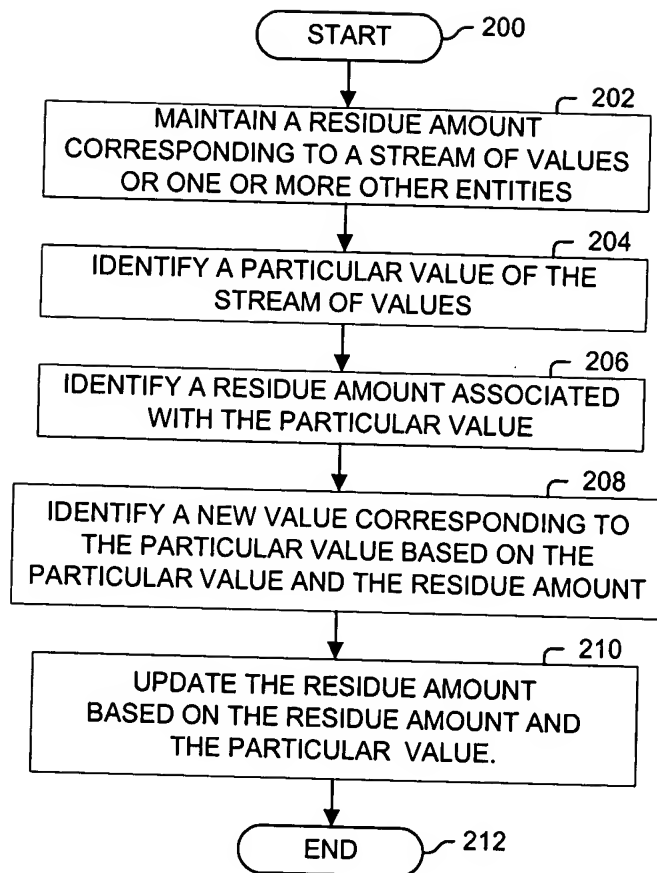
FIGURE 1C



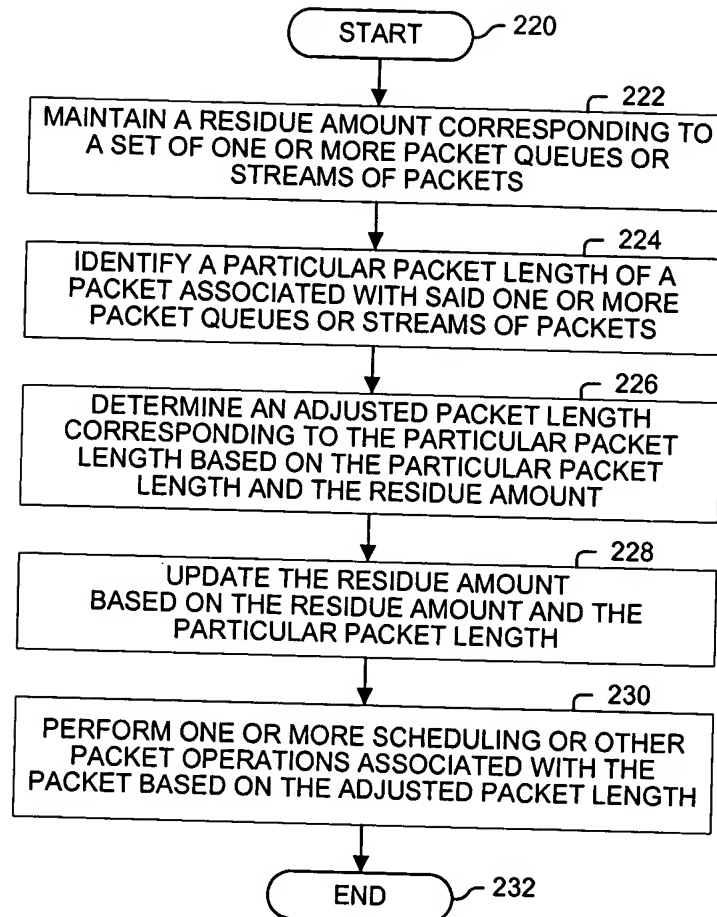
**FIGURE 1D**



**FIGURE 1E**

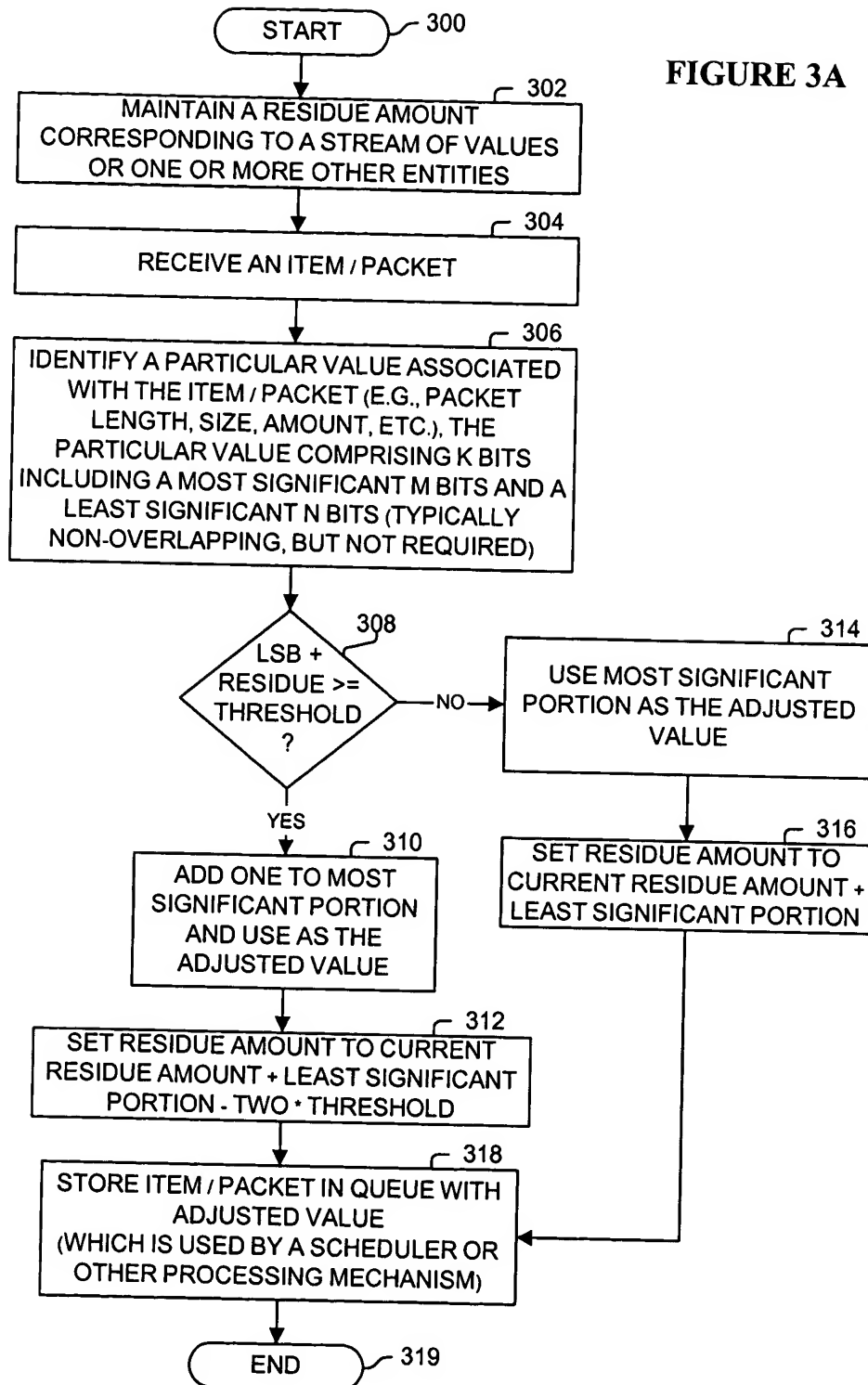


**FIGURE 2A**

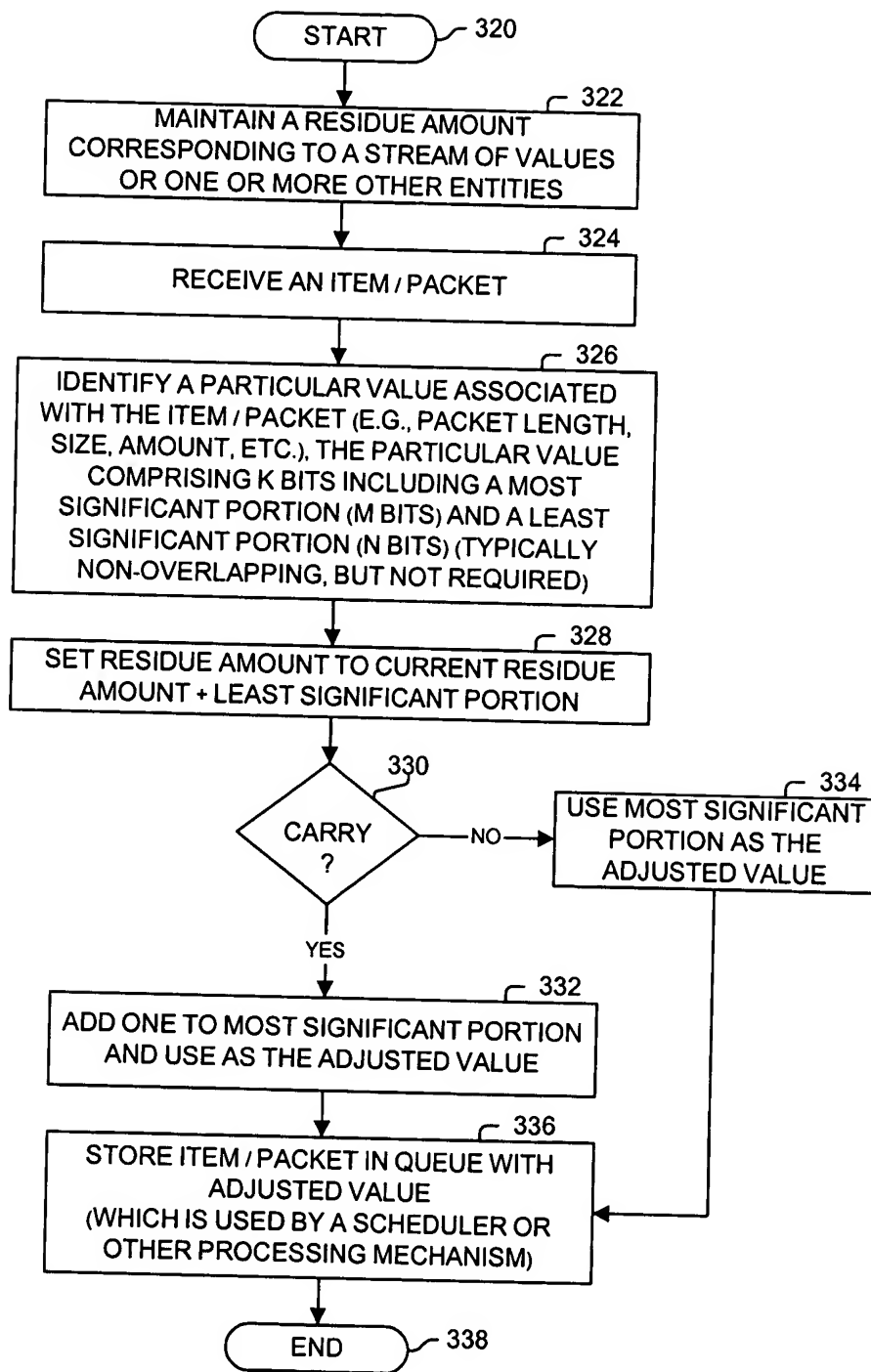


**FIGURE 2B**

FIGURE 3A







**FIGURE 3B**

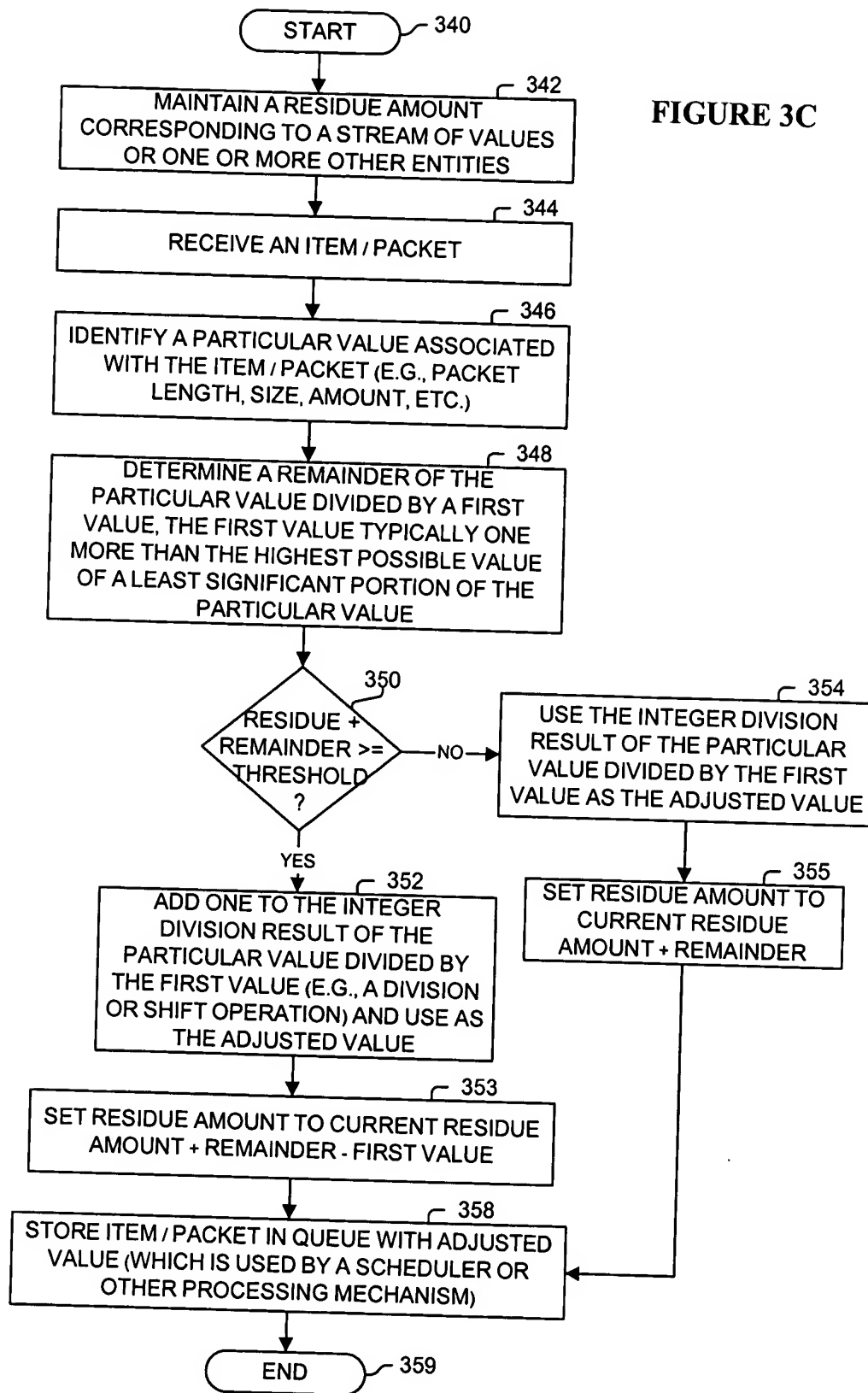
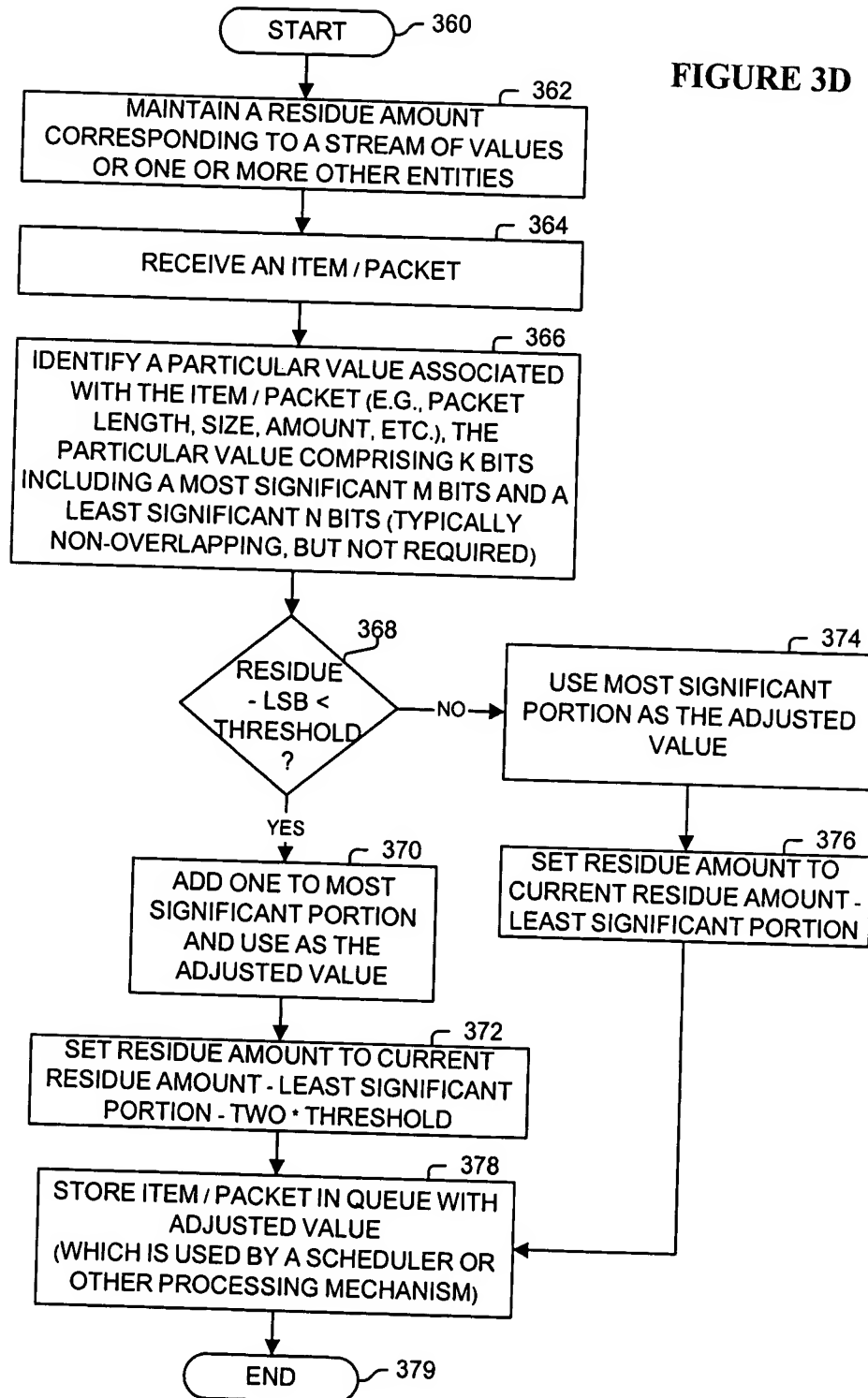


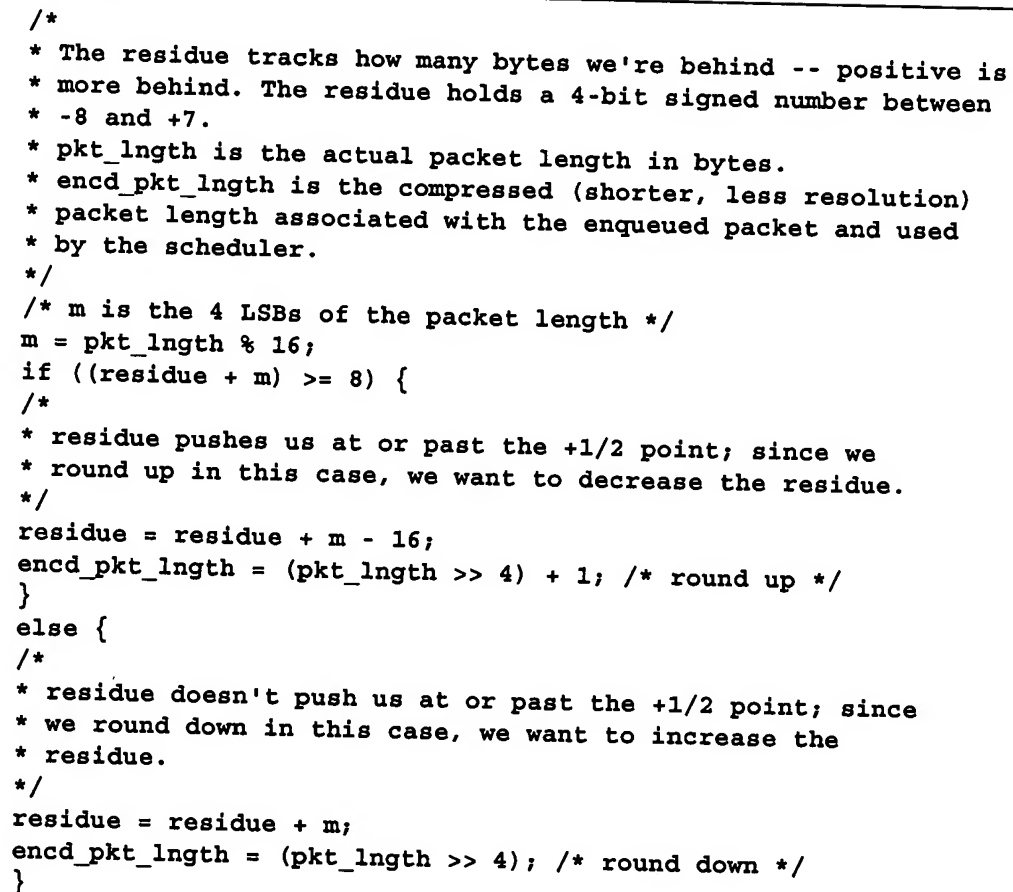
FIGURE 3C

FIGURE 3D



PSEUDO CODE

400



```
/*
 * The residue tracks how many bytes we're behind -- positive is
 * more behind. The residue holds a 4-bit signed number between
 * -8 and +7.
 * pkt_length is the actual packet length in bytes.
 * encd_pkt_length is the compressed (shorter, less resolution)
 * packet length associated with the enqueued packet and used
 * by the scheduler.
 */
/* m is the 4 LSBs of the packet length */
m = pkt_length % 16;
if ((residue + m) >= 8) {
/*
 * residue pushes us at or past the +1/2 point; since we
 * round up in this case, we want to decrease the residue.
 */
residue = residue + m - 16;
encd_pkt_length = (pkt_length >> 4) + 1; /* round up */
}
else {
/*
 * residue doesn't push us at or past the +1/2 point; since
 * we round down in this case, we want to increase the
 * residue.
 */
residue = residue + m;
encd_pkt_length = (pkt_length >> 4); /* round down */
}
```

FIGURE 4